(*continued*)

Characteristics	No Hand OA (n = 140)	Percentage of No Hand OA Group	Hand OA (n = 72)	Percentage of Hand OA Group	P-value	P-value for linear Trend
Waist Circumference > 40inches in men, >35 inches in women	122	87.1%	68	94.4%	0.099	
Knee KL grade >=2	139	99.3%	69	95.8%	0.372	
Cigarette Smoking Current	59	42.1%	34	47.2%	0.676	
Metabolic Syndrome 2 or more metabolic factors	90	64.3%	55	76.4%	0.073	
Metabolic Syndrome 3 or more metabolic factors	29	20.7%	24	33.3%	0.044	
Metabolic Syndrome Score 0–1 2 3–4	506129	35.7%43.6%20.7%	173124	23.6%43.1%33.3%	0.073	0.023
BMI (Mean, SD)	29.7 (4.8)		29.2 (3.8)		0.424	
Age (mean, SD)	59.75 (8.01)		68.11 (6.63)		<0.001	
Physical Activity PASE (Mean, SD)	168.63 (86.78)		131.54 (72.54)		0.002	

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UK TEMPORAL TRENDS FOR TIME FROM DIAGNOSIS OF HIP/KNEE OSTEOARTHRITIS TO JOINT REPLACEMENT

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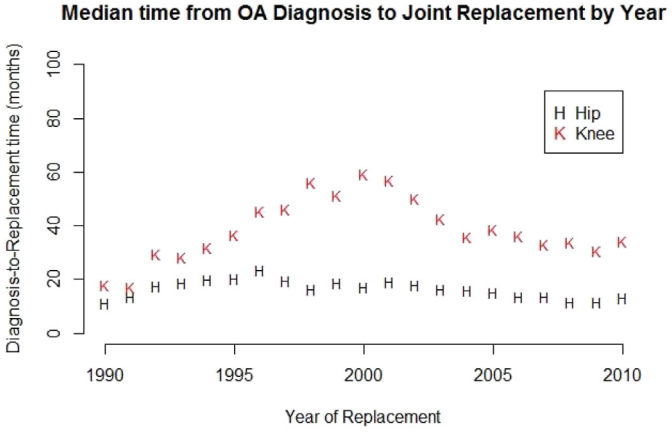
Purpose: To produce UK population-based estimates of elapsed time from first diagnosis of hip/knee osteoarthritis (OA) to primary surgery for those undergoing total joint replacement (TJR) of the hip (THR) or knee (TKR). These gender-specific estimates will compare results for hip and knee using annual summary statistics over a 20 year period.
Methods: We used data from the General Practice Research Database (GPRD) containing all the computerised records of 6.25m patients, and representative of the population of the UK. We collected data on all THRs (N = 20,739) and TKRs (N = 21,715) performed between 1991 and 2010 which also have a reliable prior diagnosis of site-specific OA. The distribution of diagnosis-to-TJR time was skewed so we used a log transformation before comparisons using t tests. As a sensitivity we used Mann-Whitney tests on untransformed time-to-TJR. Plots comparing median diagnosis-to-TJR time for hip and knee, male and female and younger and older subjects were produced for the 20-year study period.
Results: Median diagnosis-to-TJR time was 15.5 months (interquartile range[IQR] 6.7–41.3) for hip, and 38.3 (IQR: 13.7–96.1) for knee over the entire study period. Overall, and for each individual calendar year between 1991 and 2006, the time was significantly less for hips than for knees ($p < 0.0001$ for all years) when using log time in t tests. Gender-specific tests gave similar results (women: $p < 0.0001$ for all years, men: $p<0.0001$ for 1995 onwards). The same tests, but using Mann-Whitney on untransformed time-to-TJR, also produced a consistent strength and direction of association with women $p < 0.0001$ for all years except 1991 ($p = 0.0018$) and 1993 ($p = 0.0002$), and men ($p < 0.0001$ for 1995 onwards). Median time-to-TJR for men was similar to that for women, both for hips (women 15.0 months; men 16.3) and knees (women 36.9; men 40.3). However, we did find that for both hips and knees, subjects aged less than 65 at OA diagnosis had a significantly greater time-to-TJR than those aged 65 or over, but we did not find any differences in time-to-TJR when comparing obese (body mass index >= 30) to non-obese subjects.
Conclusions: Using population-based data, we have described the temporal profile of the time between diagnosis of hip/knee OA and subsequent TJR. Limitations include the fact that no data on disease severity at diagnosis was available. Also we did not account for other interventions which might delay eventual TJR, but it is suggested that these factors are unlikely to have a dramatic effect on the differences in time-to-TJR between hip and knee.



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DISJOINTED? ASSESSING THE COMPARABILITY OF HIP REPLACEMENT REGISTRIES TO IMPROVE THE MONITORING OF OUTCOMES

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Purpose: Joint replacement surgery is a common treatment for severe osteoarthritis (OA). The rising prevalence of OA has contributed to increased volumes of joint replacements being performed worldwide. With a variety of joint replacement techniques and prostheses available on the market, evaluating the safety, effectiveness, and quality of joint replacements has become critical from both clinical and healthcare system perspectives. Joint replacement registries (JRRs) have become an important source for monitoring, comparing, and improving joint replacement outcomes. A main focus of recently developed international registry organizations, including the International Society of Arthroplasty Registers (ISAR) and International Consortium of Orthopaedic Registries, has been to encourage collaborations between JRRs to improve evaluation and better understand variability in joint replacement outcomes. However, differences in definitions and methods of analysis and reporting of important outcomes, such as revisions rates and patient-reported outcome measures (PROMs), limit the ability to make meaningful comparisons across JRRs. Our objective was to assess the comparability of JRR data by examining the definitions, analyses, and outcomes reported by established hip JRRs.
Methods: To ensure high-quality hip JRRs were included, we identified full (national JRRs with over 80% national validated data) or associate (national JRRs with under 80% national data or no validation processes,